Abstract

        The invention relates to a method for logging
5   messages on a data bus and temporarily storing the sent
    messages in a cyclically overwritable volatile storing
    means. The temporarily stored messages can be examined in
    a targeted manner for attributes of interest by using a
    verification program. A storage of the temporarily stored
10 messages in a non-volatile second storing means can be
    initiated by means of definable trigger events that, for
    example, are formed from individual or a number of
    attributes of the messages. To this end, the occurrence
    of the defined trigger event is determined by a
15 monitoring unit, and the data content of the volatile
    storing means are subsequently transferred into the
    storage locations of the non-volatile storing means.

    The principal advantage achieved with the above method
20 resides in the possibility of backtracking the bus
    traffic. The exchanged messages may be backtracked and
    thus provide for the possibility to determine from which
    process and from which control device was the error
    message sent on the bus. This assists in a decisive
25 manner in the error-seeking in complex communications
    networks. By means of the backtracking of the error
    message or with the analysis as to which message has
    eventually triggered an error in the communications
    network, it may be ascertained which process is
30 responsible for the error and which program step
    triggered it. The error-seeking in the software

programming of complex control device combinations is thereby decisively facilitated.

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